



Ticks can spread a number of diseases to pets and humans, including Lyme disease and Rocky Mountain spotted fever. Control measures include prompt detection and removal, and the proper use of preventive products.

Life Cycle

- A tick life cycle has 4 life stages: egg, larva, nymph, and adult
 - This cycle can take as long as two years to complete
 - The egg, larval and nymph stages are very small, and often difficult to see with the naked eye; several would fit on the head of a pin
 - Adults are often larger, but can range from a pin head to a nickel in size, depending if they are newly attached or full of blood
- Each life stage, besides the egg, attaches itself to an animal or human, feeds on blood, then drops off to change or molt
 - Most tick-borne diseases can be carried and transmitted by all (except the egg) life stages
 - Ticks are blood feeders, requiring a bloodmeal - usually a mammal, but some feed on birds and even lizards to develop to the next life stage
 - Ticks do not jump! Nymph, larval and adult ticks “quest” or seek out animals by climbing to the top of a blade of grass and latching onto the legs of animals (or humans) that pass by
 - Tick species vary in the number of hosts they feed on within their lifetime (e.g., three-host ticks versus one-host ticks)
 - Ticks pass disease pathogens to animals and humans during blood feeding
 - Many tick-borne zoonotic diseases require long periods of attachment (24 hours) to transfer the disease-causing pathogen. So, prompt removal is essential and one of the best means of prevention

Tick Control Measures

- Tick preventative products are available for many companion animal species
 - A number of dips, sprays, dusts, and shampoos are available
 - Permethrin should NOT be used on cats. Instead, use a product containing pyrethrin or fipronil

With any tick control product, always read and follow all label directions carefully

- Keep grass and vegetation short around the home
- Remove leaves and brush from around buildings and kennel areas to reduce the number of ticks

Tick Removal

- Animals should be examined regularly for the presence of ticks
- Prompt and proper tick removal is essential to stop the transmission of disease
 - Some disease pathogens can be spread through tick feces or saliva during removal
 - Gloves should be worn during the removal of any tick; if gloves are not available, use a disposable towel or tissue
 - To remove an attached tick, grasp the tick where the mouthparts enter the skin with a narrow-tip tweezers, apply slow steady pressure and gently pull until the tick is removed; clean and disinfect the wound site
 - Avoid leaving any part of the tick embedded in the skin, as this can cause infection

Personal Protection

- Avoid tick-infested areas
 - If tick infested areas cannot be avoided, wear long sleeves, long pants and tuck pant legs into socks
 - Wear light colored clothes for easier visualization
 - Use EPA approved tick repellants (e.g., one containing DEET); permethrin may be used on clothing - Perform regular tick checks on yourself, children and pets

It is a violation of state and federal law to use a pesticide in any manner that differs from the product label. Use only according to label directions to avoid meat or milk residue hazards, environmental damage, and animal or human injury.

For More Information

Controlling ticks. University of Nebraska-Lincoln Extension. Available at: <http://www.ianrpubs.unl.edu/epublic/live/g1220/build/g1220.pdf>

Ticks and tick-borne diseases in Iowa. Iowa State University Extension. Available at: <http://www.extension.iastate.edu/Publications/PM2036.pdf>